

Appl. No. 10/604,292  
Amdt. dated January 28, 2005  
Reply to Office action of November 18, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

- 5 1 (currently amended): A portable electronic device comprising:
- a housing for accommodating a detachable battery, the detachable  
battery providing main power for operations of the portable electronic device;
- 10 a sensor ~~installed in~~ installed in the housing for detecting conditions of  
the detachable battery, the sensor comprising a conducting port for  
detecting if the type of the detachable battery is correct, for  
detecting if the power volume of the detachable battery is  
sufficient, and for detecting if the detachable battery is correctly  
installed in the battery vessel;
- 15 an operating processor for controlling operations of the portable  
electronic device; and
- a starting module electrically connected to the sensor for outputting a  
turn-on signal to the operating processor so as to automatically turn  
on the portable electronic device after the sensor detects the detachable  
battery being correctly ~~installed in~~ installed in the housing.
- 20 2 (currently amended): The portable electronic device of claim 1, ~~wherein the~~  
wherein the housing comprises a battery vessel and a battery cover plate,  
and the battery cover plate is detachably joined with the battery vessel.
- 25 3 (currently amended): The portable electronic device of claim 2, ~~wherein the~~  
wherein the sensor further comprises ~~a conducting port and a cover~~  
~~triggering port, wherein while the cover triggering port detects if for~~

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5 ~~detecting if the battery cover plate is correctly joined with the battery vessel, the conducting port detects whether port detects whether the type of the detachable battery is correct and the power volume of the detachable battery is sufficient, and the conducting port also detects if the detachable battery is correctly installed in the battery vessel.~~

10 4 (currently amended): The portable electronic device of ~~claim 3~~ claim 1, ~~wherein when~~ wherein when the conducting port ~~detects that~~ detects that the type of the detachable battery is not correct, the power volume of the detachable battery is insufficient, ~~or the~~ or the detachable battery is not correctly installed in the battery vessel, the starting module does not output the turn-on signal to the operating processor.

15 5 (currently amended): The portable electronic device of claim 3, wherein when the cover triggering port ~~detects that~~ detects that the battery cover plate is not correctly joined with the battery vessel, the starting module does not output the turn-on signal to the operating processor.

20 6 (currently amended): The portable electronic device of claim 3, wherein after the type of the detachable battery is correct, the power volume of the detachable battery is sufficient, the detachable battery is correctly installed in the battery vessel, and the battery cover plate is correctly joined with the battery vessel, the sensor outputs a correct signal to the  
25 starting module.

7 (currently amended): The portable electronic device of claim 6, ~~wherein when~~ wherein when the starting module receives the correct signal from the sensor, the starting module transforms the correct signal into the turn-on

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signal and transmits the turn-on signal to the operating processor so as to turn on the portable electronic device.

5 8 (currently amended): The portable electronic device of claim 1 further comprising a backup battery ~~for providing~~ for providing power for partial operations of the operating processor before the detachable battery is correctly installed in the housing.

10 9 (cancelled).

10 (currently amended): The portable electronic device of claim 1 being a notebook, a mobile phone, or a personal digital assistant (PDA).

15 11 (currently amended): The portable electronic device of claim 1, ~~wherein~~ wherein the operating processor is a central processing unit (CPU).

12 (currently amended): A portable electronic device that can be automatically turned on by detecting conditions of a battery, which is detachably installed in the portable  
20 electronic device for providing main power for operations of the portable electronic device, the portable electronic device comprising:

a housing for accommodating the battery, the housing comprising a battery vessel and a battery cover plate, wherein the battery cover plate is detachably joined with the battery vessel for conveniently  
25 replacing the battery installed in the battery vessel;

a sensor installed in the housing for detecting conditions of the battery cover plate and the battery to determine if the battery is correctly installed in the battery vessel and the battery cover plate is correctly joined with the battery vessel;

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- an operating processor for controlling operations of the portable  
electronic device; and
- 5 a starting module electrically connected to the sensor for outputting a  
turn-on signal to the operating processor to automatically turn on the  
portable electronic device after the battery is correctly installed in the  
battery vessel and the battery cover plate is correctly joined with  
the battery vessel.
- 10 13 (currently amended): The portable electronic device of claim 12, ~~whereinwhen~~  
wherein when the sensor detects that the battery is correctly installed in  
the battery vessel and the battery cover plate is correctly joined with the  
battery vessel, the sensor outputs a correct signal to the starting module.
- 15 14 (currently amended): The portable electronic device of claim 12, ~~whereinwhen~~  
wherein when the sensor detects that the battery cover plate is not  
correctly joined with the battery vessel, the starting module does not  
output the turn-on signal to the operating processor.
- 20 15 (currently amended): The portable electronic device of claim 12, ~~whereinwhen~~  
wherein when the sensor detects that the type of the battery is incorrect  
and the power volume of the detachable battery is insufficient, the  
starting module does not output the turn-on signal to the operating  
processor.
- 25 16 (currently amended): The portable electronic device of claim 12, ~~whereinthe~~  
wherein the sensor comprises a conducting port and a cover triggering  
port, wherein while the cover triggering port ~~detectsif~~ detects if the  
battery cover plate is correctly joined with the battery vessel, the

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conducting ~~port detects whether~~ port detects whether the type of the detachable battery is correct and the power volume of the detachable battery is sufficient, and the conducting ~~port also~~ port also detects if  
5 the detachable battery is correctly installed in the battery vessel.

17 (currently amended): The portable electronic device of claim 12 further comprising a backup battery ~~for providing~~ for providing power for partial operations of the operating processor before the detachable battery is  
10 correctly installed in the housing.

18 (cancelled).

19 (currently amended): The portable electronic device of claim 12 being a  
15 notebook, a mobile phone, or a personal digital assistant (PDA).

20 (currently amended): The portable electronic device of claim 12, ~~wherein~~ wherein the operating processor is a central processing unit (CPU).